13 corridor capacity preservation program

Draft
Phase IA Cultural Resources Survey

U.S. Route 13/ DE Route 404 Intersection Improvement Project
Bridgeville, Sussex County, Delaware

Prepared by

Johnette E. Davies and John W. Martin, RPA

Gannett Fleming

for

Delaware Department of Transportation

October 2001

ABSTRACT

This Phase IA cultural resource survey was prepared in support of the proposed U.S. Route 13 and Delaware Route 404 re-alignment project in Bridgeville, Sussex County, Delaware. This project is the result of needs identified as part of the Corridor Capacity Preservation Project planning phase, conducted from 1999-2001. Although no federal funding or permitting is required for the proposed project at this time, the Delaware Department of transportation (DelDOT) has requested this study to complement their project planning process.

The preparers conducted background research, including primary and secondary sources such as published histories, Cultural Resource Survey forms and prior reports on file at the Delaware State Historic Preservation Office, historic maps, and informant interviews. A reconnaissance level field survey was conducted in October 2001. Ten previously identified architectural resources are located in the project area, three of which have been either moved or demolished. Eight additional structures were noted as potential resources, requiring additional research to establish firm construction dates and specific historic backgrounds if intensive-level surveys are required in future.

No previously identified archaeological sites are located in the study area, however three previously identified architectural resources (S-1708, S-1711 and S-1692) are no longer extant. These locations should now be viewed as holding potential for historic archaeological remains associated with these properties. As well, property surrounding any of the inventoried standing structures should be viewed as a potential historic archaeological resource. Additionally, the former location of the Jacobs School No. 143 should be considered to have potential as an archaeological resource. Selected areas should be field surveyed (Phase IB) to assess their potential to contain prehistoric resources.

Table of Contents

List of Tables

List of Illustrations

INTRODUCTION

The Corridor Capacity Preservation Program (CCPP) was initiated by the Delaware Department of Transportation (DelDOT) in 1999 with the primary goal of preserving roadway capacity in order to avoid the construction of a new north-south highway in southern Delaware. This portion of the program focuses on U.S. Route 13 in Delaware, from Delaware Route 10 southward to the Maryland state line. The CCPP planning studies included surveys of land use, current traffic counts and projections, development potentials, and environmental constraints such as wetlands and cultural resources. Public involvement was critical in reviewing potential capacity preservation strategies and the development of recommendations for CCPP implementation.

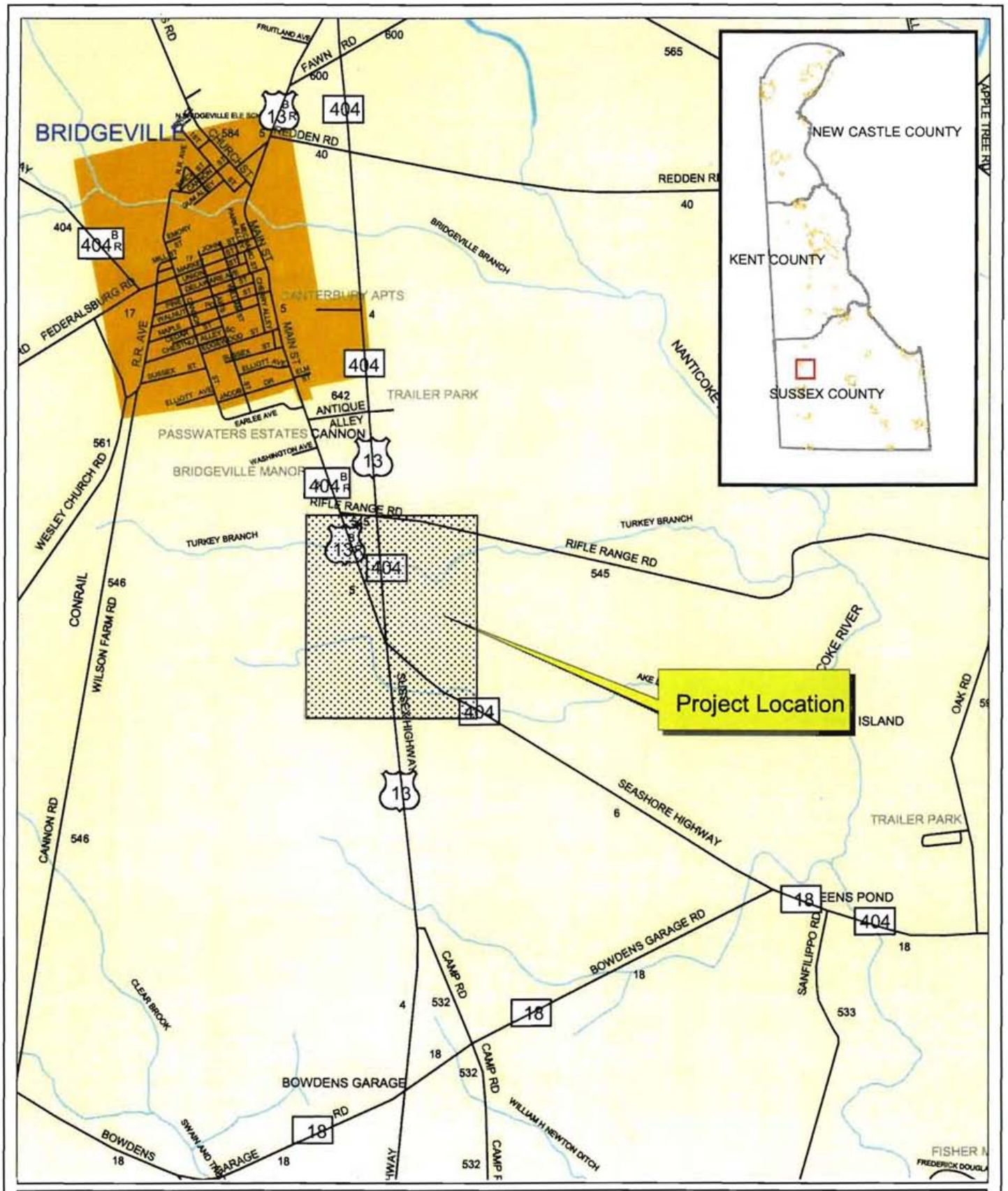
The planning phase described above resulted in the identification of several potential improvement projects. The proposed improvements to the U.S. Route 13/ Delaware Route 404 intersection (also referred to in this document as "13/404") are the result of input from state and local interests. The goal is to increase traffic safety through the area, particularly in the summer months when traffic to and from the Delaware beaches is at its peak. The project area location is illustrated in **Figure 1**.

The goals of this survey included the following:

- Document the presence or absence of previously identified cultural resources in the project area, including historic architectural and prehistoric/historic archaeological resources
- Establish a historic context for the identification of potential resources and eventual evaluation of significance, if required
- Identify potential cultural resources within the project area that have not previously been documented
- Identify areas for further investigation if subsequent regulatory compliance efforts are required.

This cultural resources study corresponds to a Phase IA survey, encompassing both historic architecture and archaeology. This investigation generally adheres to a Reconnaissance Level survey as defined in the *Guidelines for Architectural and Archaeological Surveys in Delaware* (Delaware State Historic Preservation Office 1993). The goal of this survey was to identify previously surveyed historic and archaeological sites on record and the location of potential sites. Consistent with a Phase IA survey, this study also notes where additional investigations are recommended. At present, the proposed project includes no federal funding or permitting and has not been formally initiated. Therefore, this report is not part of any Section 106 of the National Historic Preservation Act compliance documentation.

The U.S. Route 13/Delaware Route 404 intersection re-alignment project area is located just south of Bridgeville, Delaware. For the purposes of this survey, the study area is generally bounded by Rifle Range Road to the north, a line approximately 600 meters (1,970 feet) south of



U.S. 13 CORRIDOR CAPACITY PRESERVATION PROGRAM

DE 404 Realignment @ US13 and service roads

PROJECT LOCATION

DelDOT

Gannett Fleming

DRAFT OCTOBER 2001 SCALE : N.T.S.

Projection: State Plane
Datum: NAD83
Units: Meters

This map is not intended to be cartographically accurate. It is a graphical representation for planning purposes only.

the 13/404 intersection, and lines paralleling Route 13 approximately 600 meters (1,970 feet) from the roadway **(Figure 2)**. The total study area constitutes roughly 450 acres. The study area was delineated to encompass all potentially effected resources in the area, while maintaining a regular, easily definable boundary.

Previously identified sites were mapped as part of the cultural resources segment of the Corridor Capacity Preservation Project in fall/winter 2000/2001. These findings were verified once more in the field and additional potential resources identified in October 2001.

The project area is dominated by cultivated farmland with crops including corn and soybeans. The built environment is characterized by commercial roadside enterprises, particularly directly surrounding the 13/404 intersection. These include service stations, restaurants, an antique shop and a used car lot. Residences are also located along the roadways within the study area.

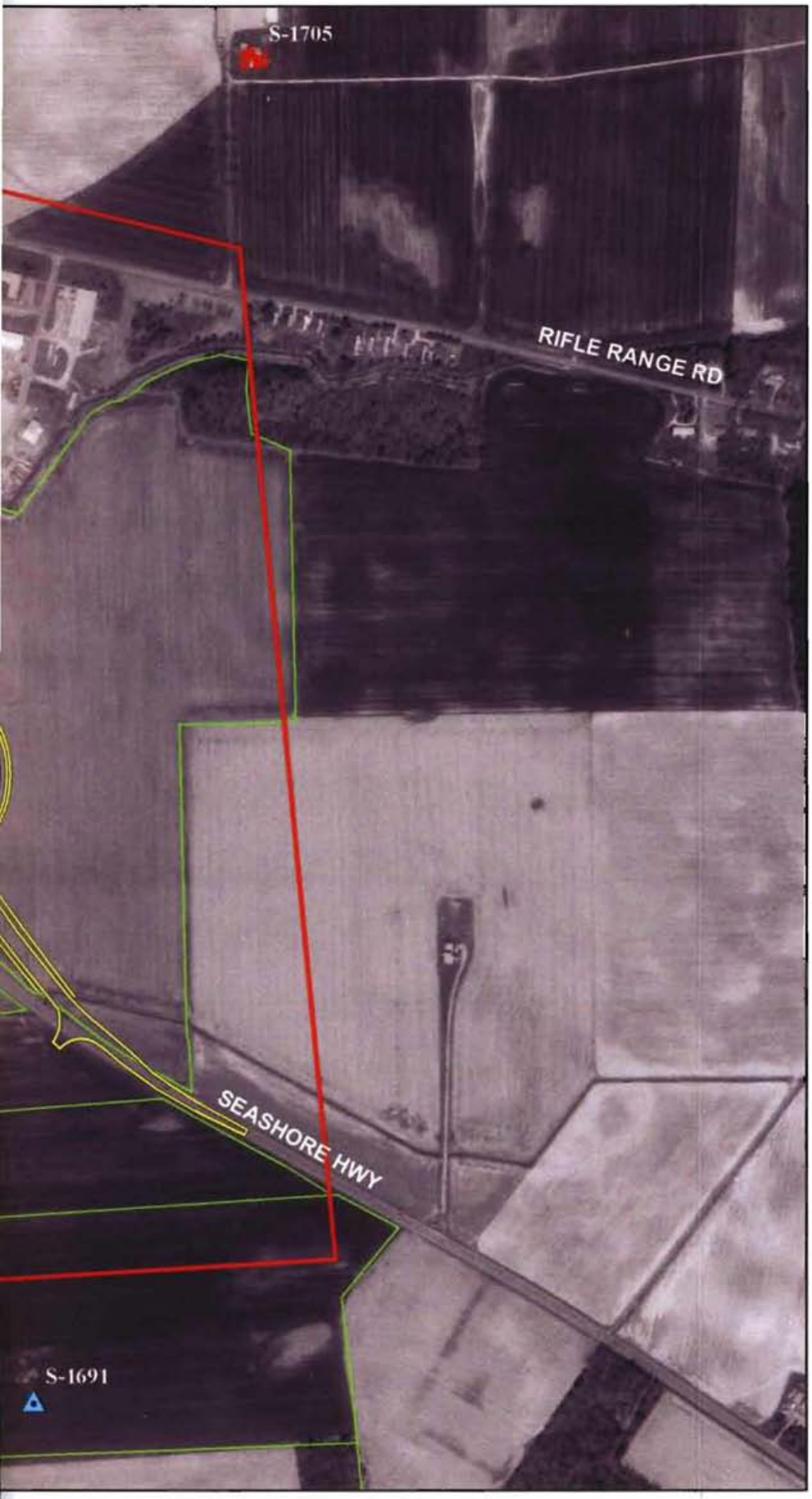
BACKGROUND RESEARCH

Physical Characteristics

The project area occupies 450 acres of cultivated and developed land surrounding the U.S. Route 13/Route 404 interchange in Sussex County. Riparian woodlands line streams and drainage ditches. The project area is situated on the Low Coastal Plain in the Chesapeake Headwater Drainage Zone (Custer 1986). The drainages located on this physiographic province typically include a variety of environmental habitats on well-drained terraces and poorly-drained lowlands. Within the project area, surface water comprises Turkey Branch which crosses Route 13 approximately 425 m (1,395 feet) north of the Route 404 intersection and Ake Ditch, which crosses Route 13 about 250 m (820 feet) south of the intersection. Both drainages flow east into the Nanticoke River that flows southward east of the project area and eventually southwest into the Chesapeake Bay.

The study area is within the Sassafras-Fallsington soil association with mapped soils including: Fallsington sandy loam; Kalmia sandy loam; Woodstown sandy loam; Woodstown loam; Sassafras sandy loam, 0-2% slopes; Evesboro loamy sand, loamy substratum, 0-2% slopes; and Rumford loamy sand, 0-5% slopes (Ireland and Matthews 1974). The soil association is typified by level to gently sloping well to poorly-drained soils with a moderately permeable subsoil of sandy loam to sandy clay. The predominant mapped soils within the project area (**Figure 3**) are Woodstown sandy loam (38%), Fallsington sandy loam (26%), Sassafras sandy loam, 0-2% slopes (23%), and Kalmia sandy loam (10%). All other types represent 2% or less of the area. Woodstown soils are upland soils that are deep and moderately well-drained with a seasonally high water table of between 0.46-0.61 m (18-24 in.). Mesic hardwood species and loblolly pine are the natural tree species for this soil. Fallsington soils are poorly-drained upland soils which support loblolly pine and wet-tolerant hardwoods. Sassafras soils are deep, well-drained soils on uplands. Mixed hardwood species and some loblolly pine would comprise the natural upper story. Kalmia series soils are upland soils that are deep and well-drained, which naturally


S-1706
S-1670
A
B
S-1710
S-1711
S-1713
S-1712
SUSSEX HWY
C
S-8456
S-9089
S-8457
MAIN ST
SUSSEX HWY
D
E
F
G
H
S-1692
S-1693



N
W E
S

Legend

- Moved/Demolished
- Previously Identified
- Potential Resources
- Rt13/404 Proposed Alignment
- StudyArea
- Parcel Boundary

Scale 1"=200m

FIGURE 2

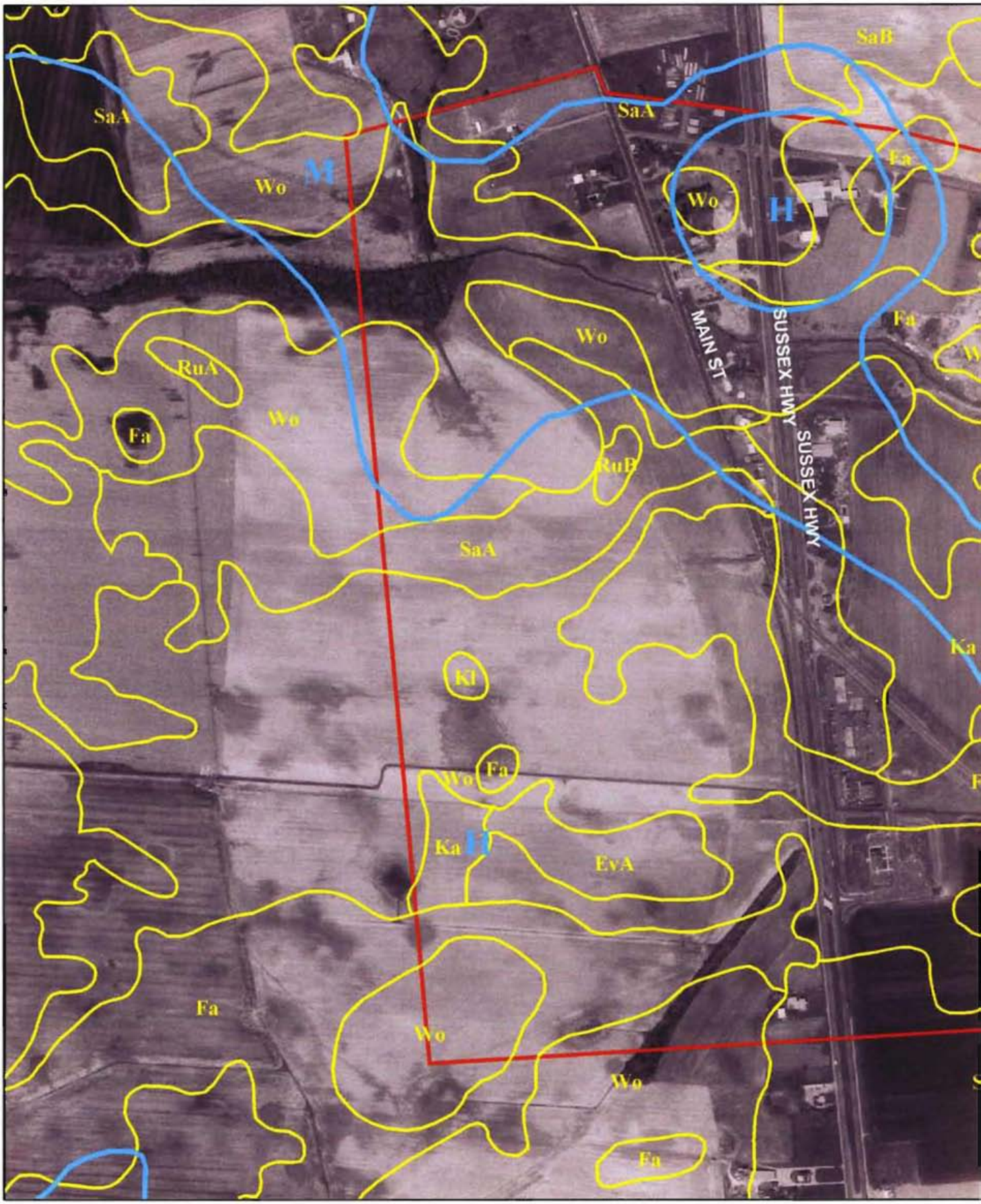
DelDOT CCPP
Rt 13/404 Intersection

ARCHITECTURAL RESOURCES MAP

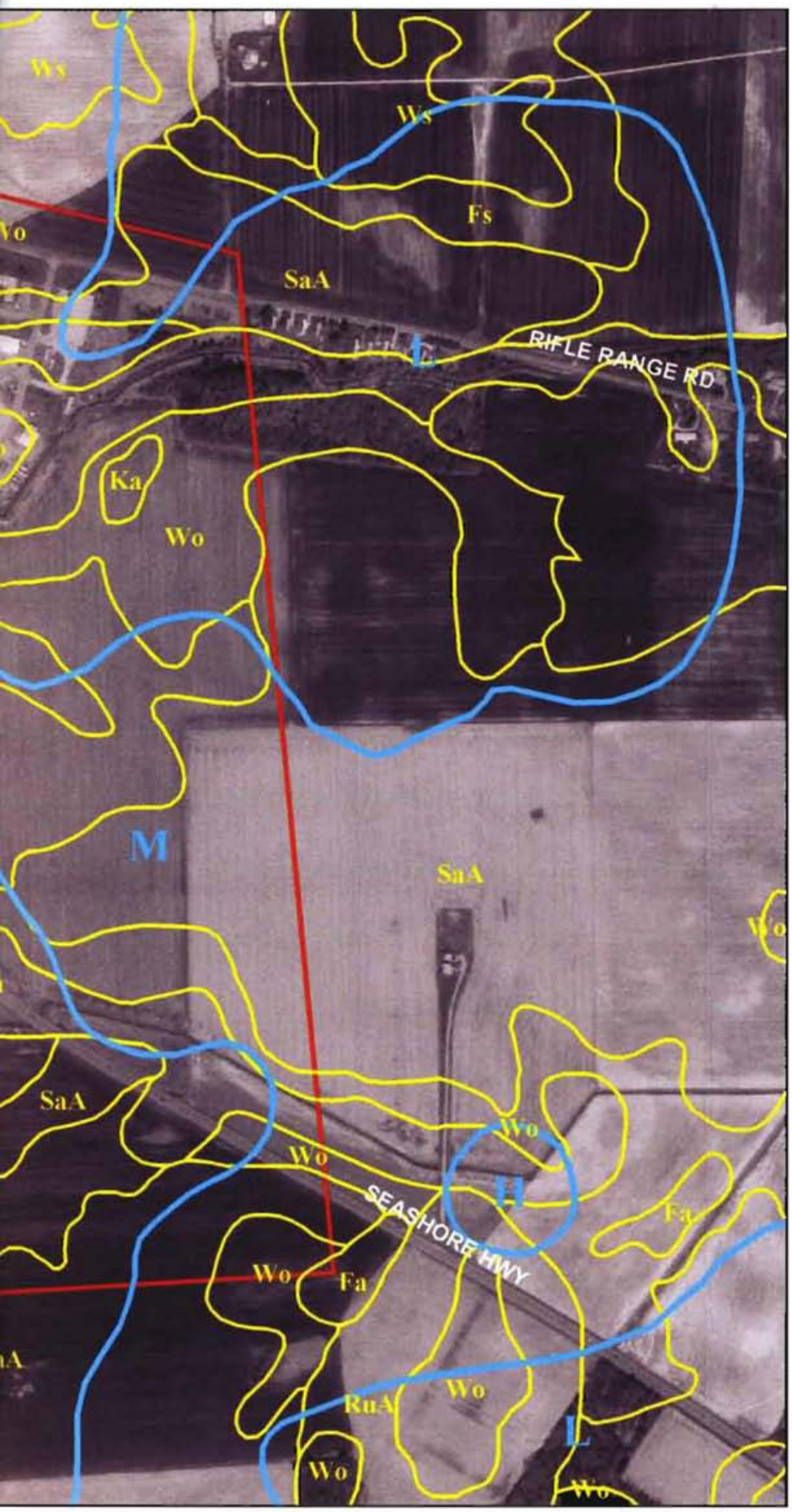
DelDOT

SCALE 1"=200m

DATE: 10/15/01



Sources: Soil Survey: Ireland and Matthews, 1974
Archaeology Probability Areas: UDCAR, 1990



N
W E
S

Legend

- Archaeological Probability
- Soil Type Boundary
- StudyArea

Scale 1"=200m

FIGURE 3

DelDOT CCPP
Rt 13/404 Intersection

ARCHAEOLOGICAL PROBABILITY & SOILS MAP

DelDOT

SCALE 1"=200m

DATE: 10/15/01

support mixed hardwoods and loblolly pine. Subsurface inspection would be required to assess the accuracy of the soils mapping and the impacts of development to the natural soil column.

Prehistoric Background

The prehistory of Delaware and the Delmarva Peninsula is summarized from detailed discussions presented elsewhere (Custer 1984, 1986, 1989, 1994). Native American cultures in Delaware have been divided into five segments: Paleo-Indian, Archaic, Woodland I, Woodland II, and European Contact. With the exception of the last period, these divisions are based on perceived changes in subsistence, settlement, and social systems of local prehistoric peoples primarily in response to changes in local and regional environments and social conditions.

At the time of the initial peopling of the Western Hemisphere, the Pleistocene Epoch was drawing to a close, and the effects of the Wisconsin Glaciation continued to influence the climate. Based on pollen profiles from locations in Delaware, at that time the region was characterized by a mosaic of different vegetational communities comprising grasslands interspersed among large stands of conifers with some deciduous trees present as well. The earliest prehistoric Native Americans, the Paleo-Indians (ca. 10,000 B.C.), were hunters and gatherers who employed distinctive chipped stone projectile points and knives referred to as "fluted points." The majority of these implements were manufactured from high-quality cryptocrystalline lithic raw material(s). Similar fluted points were found in the western United States in direct association with extinct Pleistocene megafauna such as bison and mammoth. However, no such association has yet been documented east of the Mississippi River. In Delaware and other parts of the Middle Atlantic region, smaller mammals such as caribou, elk, and deer are thought to have been the focus of Paleo-Indian hunting activities. Floral and faunal remains from the Paleo-Indian component of the Shawnee-Minisink site in the Upper Delaware Valley also document the exploitation of wild plant foods and fish (McNett et al. 1977; Kauffman and Dent 1982). The relatively sparse evidence for this period suggests that Paleo-Indians lived in small, highly mobile groups or bands. It is also suggested that the preference for high quality stone materials influenced the settlement pattern. Many Paleo-Indian sites are located near primary geological outcrops or rich gravel beds containing these raw materials. In the latter stages of this period a variety of notched bifaces replaced the fluted points.

The beginning of the Archaic period coincides with the development of Holocene environments by circa 6500 B.C. During this period essentially modern environments developed in the Middle Atlantic region. The Archaic period represents a continuation of lifeways essentially similar to those interpreted for the Paleo-Indian period but without the almost exclusive reliance on cryptocrystalline raw lithic material. A variety of ground stone tools were added to the chipped stone tool kit indicating a greater use of floral resources. Group movements were scheduled to coincide with the seasonal availability of a variety of floral and faunal resources. In general, Archaic cultures exploited a wider variety of resources than their predecessors and did so from more specialized sites located in a greater range of settings and visited according to seasonal availabilities. However, evidence suggests that they also lived in small, highly mobile bands.

During the Woodland I period (ca. 3000 B.C.) there was a marked shift toward more sedentary lifeways. Settlements became larger and more numerous, particularly in highly productive

riverine and estuarine habitats where both marine fish and shellfish were exploited. Recurrent seasonal occupation of sites is also apparent, as are changes in technologies. The latter innovations include the appearance of heavy woodworking tools such as axes and adzes, large stone hearths and, during the early part of the period, carved steatite vessels, which are believed to have increased cooking efficiency and possibly served as storage containers. Ceramic vessels also make their appearance (ca. 1000 B.C.) during this period. Some of the earliest types had flat bases and handles similar in form to steatite containers. Conical shaped ceramic vessels also occur during the first millennium and persisted until the arrival of Europeans. During the Woodland I period, a variety of notched and stemmed bifaces manufactured from a wide variety of lithic materials were in use. The presence of non-local items at many sites that date to this period are indicative of wide-ranging trade and exchange networks and the possible presence of complex, hierarchical social systems.

The final prehistoric period in Delaware (Woodland II) began at approximately A.D. 1000. The trade and exchange networks of the preceding period had broken down or ceased to function by this time. Hoe-type horticulture, including crops such as maize, beans, and squash, supplemented traditional wild animal and plant foods, though its impact in Delaware was limited (Custer and Griffith 1986; Stewart et al. 1986). The introduction of the bow and arrow and exclusive use of triangular projectile points were the two major technological innovations. Ceramics exhibit complex incised design motifs, and clay tobacco pipes also make their first appearance.

The arrival of European explorers and settlers marks the close of the Woodland II period. Contact with the native peoples brought about profound and irreversible changes in the socio-economic organization and technologies of Delaware's Native Americans. An increased reliance upon articles of European derivation took place while, concomitantly, an overall decline is noted in the manufacture and use of native goods. During the 17th and 18th centuries European diseases, conflict and treachery decimated the aboriginal populations to the extent that, by 1800, only a few individuals remained as residents within the state.

No prehistoric archaeological sites have been recorded within the study area. Previous surveys in the Route 404 corridor (Catts et al. 1991; Catts et al. 1994) and the Nanticoke watershed (Custer and Mellin 1989) have identified sites in the vicinity of the study area. However, neither survey included fieldwork in the present study area.

Historic Background

[This section largely summarizes Tabachnick et al. (1992) unless otherwise attributed.]

The earliest European settlement in colonial Delaware was at Lewes, on the east coast of Sussex County, in 1631. This Swedish venture was short-lived, however, lasting only about a year. Although Sussex County is the initial portion of Delaware that is accessible from the Atlantic Ocean and Delaware Bay, settlement lagged behind the more interior areas of present-day New Castle and Wilmington in New Castle County. Swedish, Dutch and English interests competed for supremacy in Delaware throughout the seventeenth century, while Native Americans such as the Nanticoke and Lenni Lenape tribes continued to occupy the interior lands.

In 1680, the county was named Deale County, and this was changed to Sussex County when governorship was granted to William Penn in 1682. Although according to this grant Penn controlled the lands of Delaware, the Maryland government continued issuing land grants. The Mason-Dixon Line finally resolved these boundary conflicts after its survey in 1763-1768 (Munroe 2001).

Throughout the colonial period and well into the 19th century, transportation in Sussex County relied upon navigable water routes. Therefore, settlement generally occurred adjacent to these routes, particularly in the interior lands. The eastern portion of Sussex County drains to the Delaware Bay and Atlantic Ocean, and the west side to the Chesapeake Bay. Cultural and economic ties tended to follow these spheres of influence throughout much of the area's history. As the study area lies in the western part of the state and within the Nanticoke River basin, it was more akin to Chesapeake Bay culture. Tobacco, corn and wheat were significant crops in the colonial period, however tobacco farming waned somewhat toward the later part of the 18th century. Livestock, such as cows and hogs, was also raised in Sussex County.

The town of Bridgeville dates back to 1730, during the earliest portion of the Intensified and Durable Occupation context (Herman and Siders 1989). Significant deforestation and the establishment of transportation networks took place in this period. Known as "the oldest community in western Sussex County," Bridgeville was originally settled in the vicinity of a bridge over a tributary of the Nanticoke River, and at that time was called "Bridge Branch" (*Bridgeville Historic District Nomination*).

The town grew around this location and its name was changed to "Bridgeville" by an Act of Assembly in 1810. Bridgeville held considerable influence in the early 19th century, as it remained larger than any other town in the region – including Seaford and Laurel – at that time (Scharf 1888). Businesses included stores, granaries, blacksmith and carriage shops, a tanyard, a mill and a fruit-drying business (*Bridgeville Historic District Nomination*). Bridgeville's growth was limited during this early period, however, since the branch was not a major waterway.

Several other industry types were located in western Sussex County at this time, including iron furnaces, forestry, agriculture, various types of milling and home-based manufacturing.

Slavery and tenant farming became significant modes of labor in the nineteenth century, and the numbers of these individuals also brought a commensurate increase in general population. A number of free blacks were tenant farmers and hired laborers. Sussex County contained more than half of Delaware's slaves at the start of the Civil War. Both tenant and slave housing would have been associated with farms throughout the county.

A railroad line was constructed through western Sussex County in the 1850s, causing the development of new towns and the expansion of towns already located on the rail route. Bridgeville's major period of growth and expansion occurred at this time. A prominent local citizen and land holder, William Cannon, divided his property south of the branch and east of the railroad tracks, and this became the layout of the town that exists today. North-south streets were named for Mr. Cannon's son, Major William Laws Cannon (Anonymous n.d.). Subsequent

growth in Bridgeville followed the grid, and the center of town shifted away from the bridge to Market Street. The Cannon family remains active in the Bridgeville community. The Bridgeville Historic District, encompassing most of the town, was placed on the National Register of Historic Places in 1994.

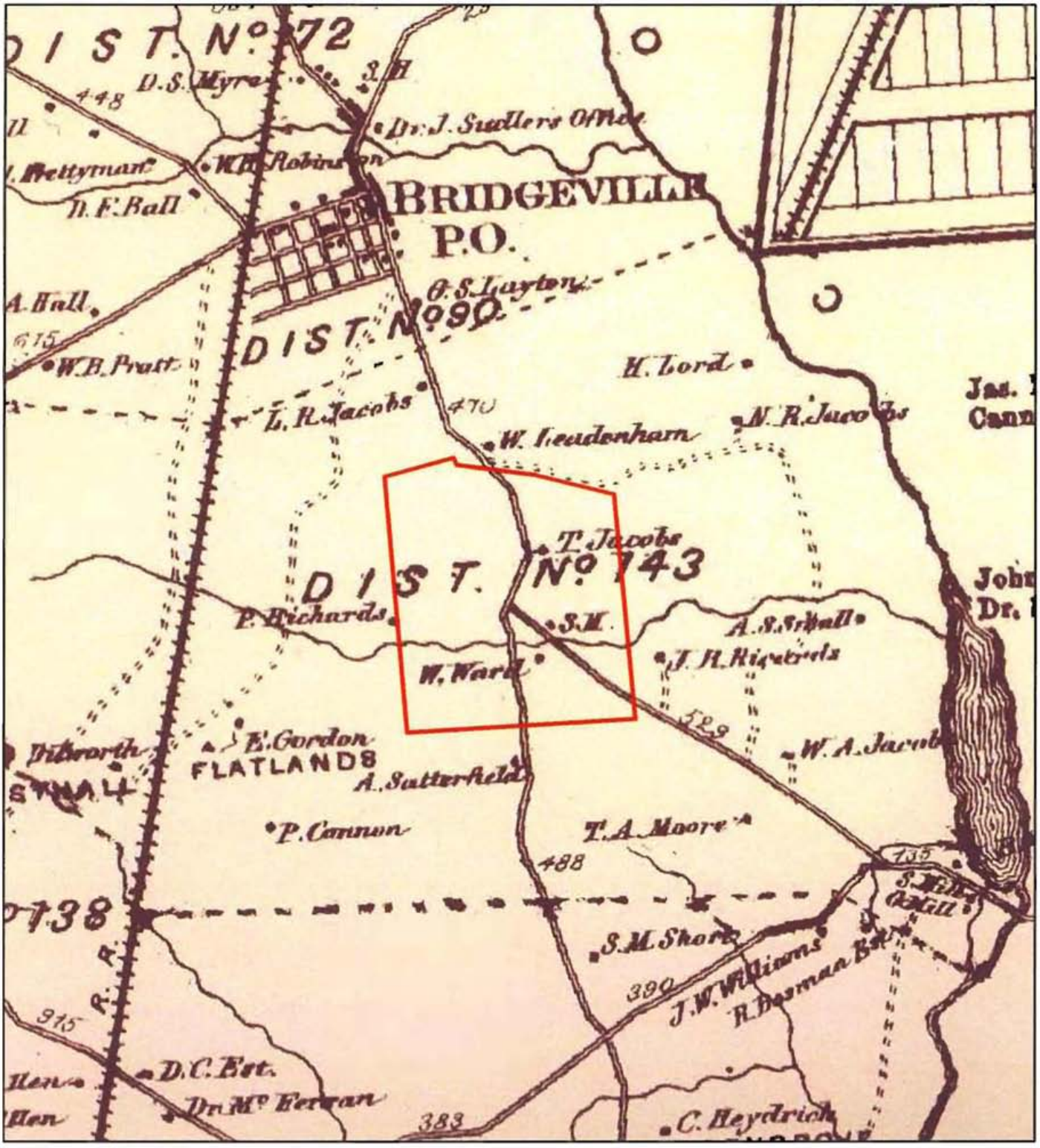
The Beers (1868) map of Delaware shows that the area south of the town of Bridgeville was sparsely settled at that time (**Figure 4**). The properties in the area probably mostly consisted of farms, since southern Delaware was largely dependent upon an agricultural economy. Several businesses in Bridgeville were related to agriculture, including canneries and fruit-drying facilities. Cultivated fields still constitute the majority of the study area. Berry basket production and canning operations in Bridgeville are indicative of growing industrial endeavors in southern Delaware during this time period. These types of industries were mainstays in other towns as well, including Laurel and Harrington.

The efficiency of railroad transport spurred the transition from sustenance to cash crops in southern Delaware. Orchards and berry fields yielded tremendous amounts of apples, strawberries, watermelons and other fruits and vegetables. "In 1902 Sussex County grew more berries than any other county in the United States. The vast majority of these passed through Bridgeville" (Anonymous n.d.: 3). The agricultural focus of southern Delaware shifted again through the early 20th century to include soybeans and broiler chickens as the focus of production. Corn remains a staple crop, both for food production and livestock feed. Lumbering continued to be a major industry in the early 20th century, and Holly wreath production boomed from the 1880s to 1960s.

The early 20th century saw a revolution in transportation. The increasing number and mobility of the populous and the popularity of the automobile hastened the need for improved roadways. Coleman DuPont initiated an ambitious road building program for Delaware, with an aim of constructing a north-south highway running the length of the state. Coupled with new federal laws making transportation funds available to states with highway departments, this was the impetus for creating Delaware's state highway department. Eventually, Routes 113 and 13 were completed as part of DuPont's program, and the majority of today's major roadways were in place by 1934.

By the 1930s, trucks, rather than trains, had taken over as the preferred method of transporting goods to market. The development of Route 13 and other improved roads in the region contributed to this transition. A land use map created in 1941 for *An Economic Study of Land Utilization in Sussex County, Delaware* shows Route 13, Route 404 and Rifle Range Road as hard surface roads at that time. In addition, this map also shows the study area having Class III and IV land classifications. These are the second-most and most intensively used crop land classifications, respectively (Delaware Agricultural Experiment Station 1941). Much of this land remains cultivated today.

The new focus on automobile transportation also brought new kinds of business focused along the roadway. Restaurants, service stations and new patterns of residential development accompanied road improvements. The project area exhibits some of these building types and



DelDOT

Gannett Fleming

N
W E
S

Legend

StudyArea

Source: Beers, 1868

FIGURE 4

DelDOT CCPP
Rt 13/404 Intersection

HISTORIC LOCATION MAP

DELAWARE
DEPARTMENT OF
TRANSPORTATION

SCALE 1"=800m

DATE: 10/15/01

continues to evolve in a car-oriented, suburban manner. Many of the standing structures in the study area date to this period of development.

RESEARCH DESIGN AND METHODOLOGY

The study area is situated on the Low Coastal Plain in the Chesapeake Headwater Drainage Zone. This area is included in the Mid-Drainage (Nanticoke drainage) Management Unit, which is characterized as having a moderate potential for significant prehistoric archaeological sites (Custer 1986). The study area lies outside of the Riverine Management Unit in Custer (1989b), which primarily focuses on portions of the Nanticoke River downstream from the study area. The area is contained within the Medium Data Quality, Medium Probability zone of composite rank categories for prehistoric archaeology (Custer 1986: Figure 35).

Prehistoric archaeological probability maps (UDCAR 1990), historic maps and Cultural Resource Survey forms on file at the Delaware State Historic Preservation Office (SHPO) were consulted in order to assess the likelihood for archaeological sites within the study area. The project area was visited to assess current field conditions. At the time of visitation, the cornfields within the study were being harvested, preventing examination. Portions visible adjacent to the road evidenced considerable weed growth, obscuring the ground. Other cultivated areas were still in soybean, which also inhibited surface visibility. No subsurface testing was conducted as part of this study.

In addition to checking archaeological site and CRS forms at the DESHPO, regional surveys were also examined for data applicable to the study area. The previous studies for the Route 404 corridor were obviously useful in that the present interchange was included in the area subjected to evaluation for archaeological potential (Catts et al. 1991). The entire corridor was placed into one of six management zones, and archaeological sensitivity (likelihood to contain significant resources) was assessed for each zone. The intersection was judged to have a low prehistoric sensitivity while medium and high sensitivity for both pre- and post-1830 historic resources (Catts et al. 1991: Table 22 and Figure 43). Subsequent archaeological fieldwork (Catts et al. 1994) did not examine the study area, however.

As per overall project goals, the background historical research portion of this survey was undertaken in order to form general contexts for the project area. This effort included consulting both secondary and primary sources including general historical overviews, prior reports and historic maps, and an interview with a local lifetime resident.

Bridgeville (listed as Bridgebranch) is included as a smaller settlement in the Intensified and Durable Occupation 1730-1770 +/- time period in the *Management Plan for Delaware's Historical Archaeological Resources* (De Cunzo and Catts 1990: Table 16). Historical archaeological research should be guided by this framework which provides the beginning for contextual assessment.

Field efforts included verifying the location of previously identified resources, as well as the identification of additional structures that appear to meet the 50-year age criterion for National Register eligibility. These tasks were accomplished via windshield survey.

SURVEY FINDINGS

Archaeological Resources

The study area was examined in close detail with the prehistoric probability maps (UDCAR 1990). Most of the area is mapped as having a high and medium probability for significant prehistoric sites (**Figure 3**). This does not mean that the study area will contain prehistoric archaeological resources, only that based upon data used to build the probability model, the study area contains settings which correspond to areas which have been found to contain archaeological resources. Employing the mapped soil types (Ireland and Matthews 1974), it can be seen that poorly-drained Fallisington series soils are associated with both of the surface drainages within the study area. These areas would not be expected to contain many prehistoric archaeological sites, although better drained soils adjacent to them may very well. In the survey of the southwestern portion of the county (Custer and Mellin 1989: Table 13), Evesboro soils underlie 87% of the recorded prehistoric sites. Sites are located on Rumford and Woodstown soils 5% and 4% of the time, respectively. Fallsington, Pocomoke, and Sassafras, soils are site locations for 2% of the recorded sites each. Finally, of the 2,148 sites recorded for the Lower Coastal Plain of the Delmarva Peninsula (Custer 1989a), 60% occur within 100 meters (328 feet) of surface water and another 24% occur between 100 and 150 meters (328-492 feet) of surface water. Therefore, based on the probability mapping and mapped soils, there is a medium to high probability of encountering prehistoric archaeological sites within the study area. Field checking would be necessary to verify the accuracy of the soils mapping.

As noted above, field conditions and activities prevented a surface assessment of the study area regarding visible archaeological remains. Therefore, no assessment can be given regarding the potential for prehistoric archaeological sites other than the discussion in the previous section. Because the majority of the potential historic archaeological sites are associated with former structures which were previously surveyed, these are addressed under the Architectural Resources section below.

Architectural Resources

As a result of the background research, several historic contexts were identified as applicable to the study area, which is located in the Lower Peninsula/Cypress Swamp zone. As identified in Herman and Siders (1989), applicable contexts are as follows:

- Agriculture
- Forestry
- Transportation and Communication
- Architecture, Engineering and Decorative Arts
- Major Facilities, Individuals and Events

- Settlement Patterns and Demographic Change

The significance of potential resources relative to these contexts should be determined if National Register eligibility assessments are required.

Cursory field investigation resulted in the verification of previously identified resources and the identification of several potential architectural resources. The findings from these investigations are discussed below.

Previously Identified Resources

The review of records at the SHPO revealed ten previously identified resources in the study area. Of these, seven are extant, while three others have either been demolished or moved from their surveyed locations. Noting their deteriorated state at the latest survey dates, these structures were most likely demolished. The majority of the previously identified resources are dwellings, some of which include outbuildings on the property. There are also a previously surveyed bridge in the study area (S-9089) and a mid 20th-century diner (S-8457). Moved/demolished resources included frame center-hall plan farmhouses (S-1692 and S-1708) and a small pyramid-roofed bungalow among the houses along the east side of Route 13A (S-1711). All previously identified resources are mapped on **Figure 2**.

The status of each of each previously identified resource is described in the table below. Eligibility recommendations were included in the Tabachnick et al. (1992) and Lichtenstein Consulting Engineers, Inc. (2000) reports. These are included where applicable.

CRS Number	Location	Status	Previous Eligibility Recommendation
S-1670	Route 13A, west side	Good Condition	
S-1692	Route 13, west side, south of Rte 404.	Demolished/moved	
S-1708	Route 13, east side,	Demolished/moved; silo extant	Not eligible (1992)
S-1710	Route 13A, east side	Good Condition– altered	Not eligible (1992)
S-1711	Route 13A, east side	Demolished/moved	Individually eligible (1992)
S-1712	Route 13A, east side	Good Condition	Individually eligible (1992)
S-1713	Route 13A, east side	Good Condition - altered	Not eligible (1992)
S-8456	Route 13A, east side	Good Condition	Not eligible (1992)
S-8457	Route 13A, east side	Good Condition	Eligible – Commercial Roadside, Multiple Property Submission (1992)
S-9089	Route 13 Bridge over Turkey Branch, Bridgeville.	Good Condition	Not eligible (2000)

Table 1: Previously Identified Resources

Full descriptions and discussions of eligibility recommendations of these properties are contained in Tabachnick et al. (1992) and Lichtenstein Consulting Engineers, Inc. (2000). These descriptions are summarized with each photograph of extant resources below.

Plate 1: S-1670. Route 13A, west side, south of Rifle Range Road. Facing west. October 2001.

The 2-story 3-bay frame dwelling (S-1670) depicted in **Plate 1** is in good condition. The dwelling features two end chimneys, an addition on the south side and a portico over the entry. There are outbuildings on the site, as well. A sign in the yard advertises antiques for sale.

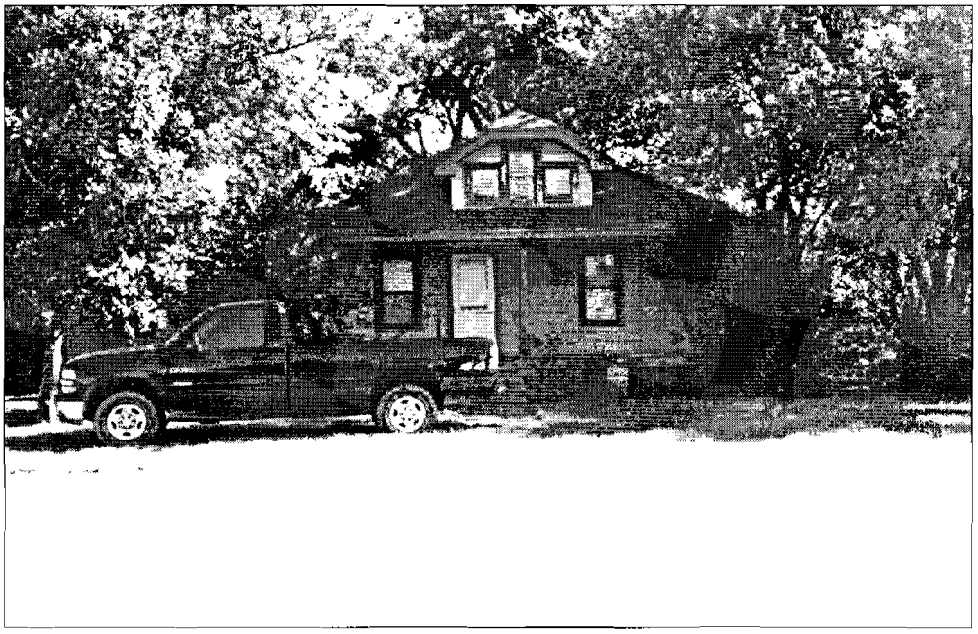


Plate 2: S-1710. Route 13A, east side, south of Rifle Range Road. Facing East. October 2001.

S-1710 **(Plate 2)** is a 1 ½-story, 2-bay frame bungalow. Its distinctive feature is the clipped gable dormer with three windows, one tall one-over-one window with two smaller flanking windows. An addition and a covered walkway have been added since this house was constructed

in the late 19th century. Due to these alterations, this structure has been recommended as not eligible for the National Register of Historic Places.

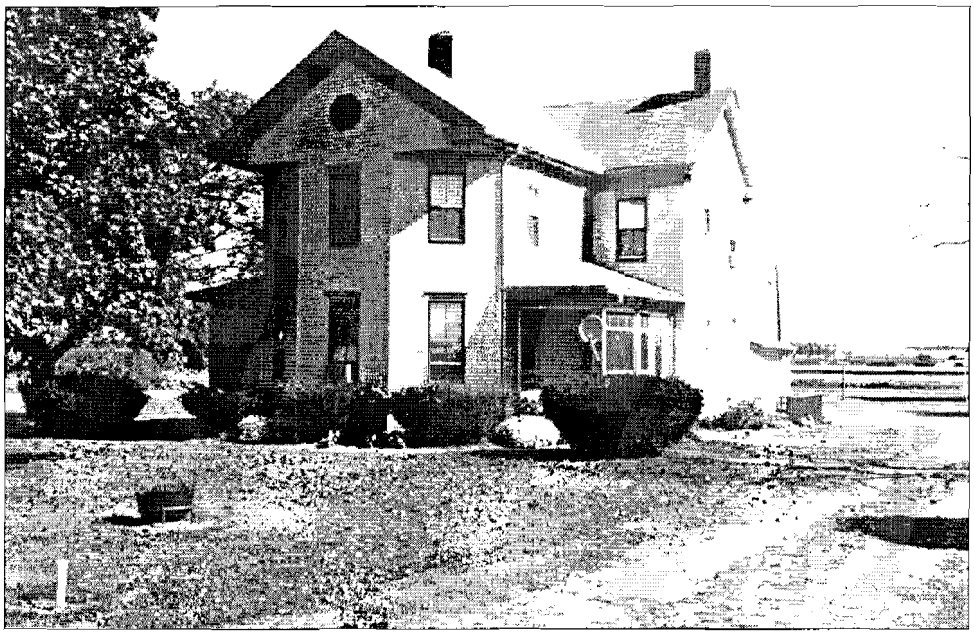


Plate 3: S-1712. Route 13A, east side, south of Rifle Range Road. Facing east northeast. October 2001.

S-1712 is a 2-story 3-bay frame dwelling with a 2-story 3-bay wing on the west façade, creating a unique appearance **(Plate 3)**. Screened hipped-roof porches flank this wing. A kitchen wing appears to pre-date the dwelling, and other outbuildings are present. The survey photographs of this property refers to it as the Reverend Clarence Abbott House. Original shake siding has been replaced by or is covered by vinyl siding. This has occurred since the Tabachnik et al. (1992) report. This property was recommended individually eligible within the context of Agriculture.

Plate 4: S-1713. Route 13A, east side, south of Rifle Range Road. Facing east. October 2001.

S-1713 **(Plate 4)** consists of a 2-story 5-bay symmetrical frame dwelling with a rectangular plan and cross-gable roof. The house currently has a porch extending the length of the 1st floor on the primary façade. This differs from the appearance in the Tabachnick et. al. report, wherein the house had no porch, had metal awnings over each window and had a one-over-one window in the gable on the primary façade (1992). The awnings have been removed, the porch added and the gable window replaced with a small vent. This 19th-century dwelling was recommended not eligible due to later additions.

Plate 5: S-8456. Route 13A, east side, south of Rifle Range Road. Facing east. October 2001.

The 1 ½-story, 3-bay frame dwelling depicted in **Plate 5** dates to the mid-20th century. The steeply pitched gable roof is pierced by two symmetrical gabled dormers. This structure was recommended ineligible due to its apparent lack of architectural and historical significance.

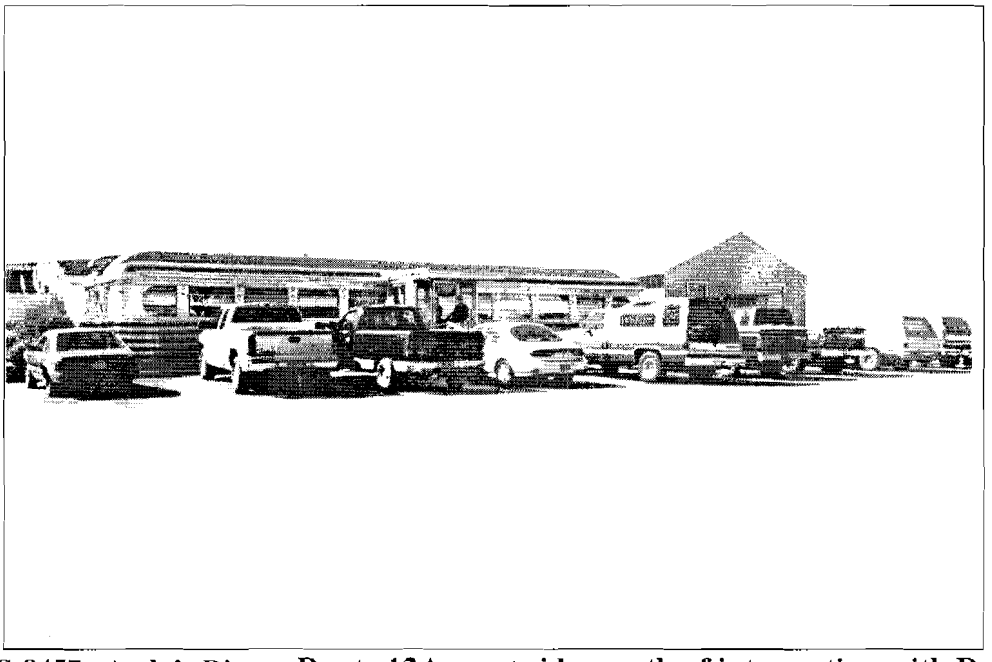


Plate 6: S-8457. Andy's Diner. Route 13A, west side, north of intersection with Route 404. October 2001.

Andy's Diner (S-8457, **Plate 6**) consists of a dining car attached to a modern 1-story structure. The sleek stainless steel dining car is consistent with other dining cars built in the early 20th century. It was most likely placed in its current location after the completion of Route 13 in the 1930s. The diner was recommended eligible as part of a proposed Commercial Roadside Multiple Property Submission. It is architecturally significant within the Suburbanization and Transportation contexts of the early 20th century.

Potential Architectural Resources

Several properties in the project area that have not been previously surveyed appear to meet the minimum 50-year age criterion for National Register eligibility. Additional investigation would be required to determine specific construction dates, background histories and potential significance. These properties are also mapped on **Figure 2**, and are labeled as structures A-H. Observations regarding each of these properties are summarized in the table below.

ID Letter	Location	Status	Notes
A	SE corner Route 13A and Rifle Range Rd.	Altered	Print shop associated with S-1710.
B	Rifle Range Rd., south side, between Route 13 and 13A.	Good Condition	Outbuilding: may pre-date house currently on the lot.
C	Rifle Range Rd., south side, east of Route 13.	Altered	The larger, rear portion (potentially commercial) appears to pre-date the smaller, front entrance addition.
D	Route 13, east side, 4th building north of Route 404	Moved	Small 1-story dwelling. In good condition, however, local source says the structure was moved to this location from south of Route 404.
E	Route 13, east side, 3rd building north of Route 404	Deteriorated	Abandoned service station currently filled with debris.
F	Route 13, east side, 2nd building north of Route 404	Altered	Currently insurance agency on 1st floor and apartment on 2nd floor.
G	Route 13, east side, 1st building north of Route 404	Deteriorated	Abandoned service station.
H	NE corner, Route 13 and Route 404.	Deteriorated	Abandoned shed; formerly associated with airfield.

Table 2: Potential Architectural Resources

Mr. Howard Hardesty, lifelong resident of Bridgeville, Delaware, outlined the history of some of the structures extant around the U. S. Route 13/ Route 404 intersection (Hardesty, personal communication 2001). Several of the potential architectural resources noted in this survey are related to the commerce and function of Route 13. Service stations and commercial establishments, specifically, demonstrate the evolving nature of Route 13, particularly in light of the abandonment of these older structures in favor of more recent establishments in the vicinity.

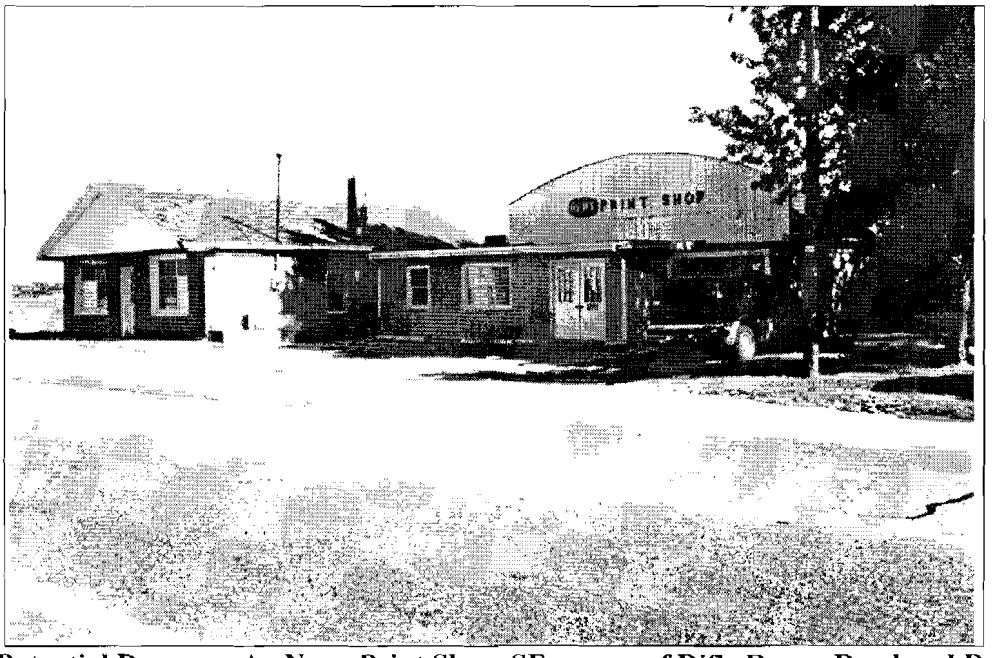


Plate 7: Potential Resource A. News Print Shop, SE corner of Rifle Range Road and Route 13A. October 2001.

The first potential resource identified, labeled "A," is located at the southeast corner of Route 13A and Rifle Range Road **(Plate 7)**. This is a one-story, 3-bay commercial structure oriented to Route 13A. The building has been altered, and it is currently connected to the News Print Shop by an addition. Alterations have diminished the architectural integrity of this structure, however its historic background and significance requires further investigation.

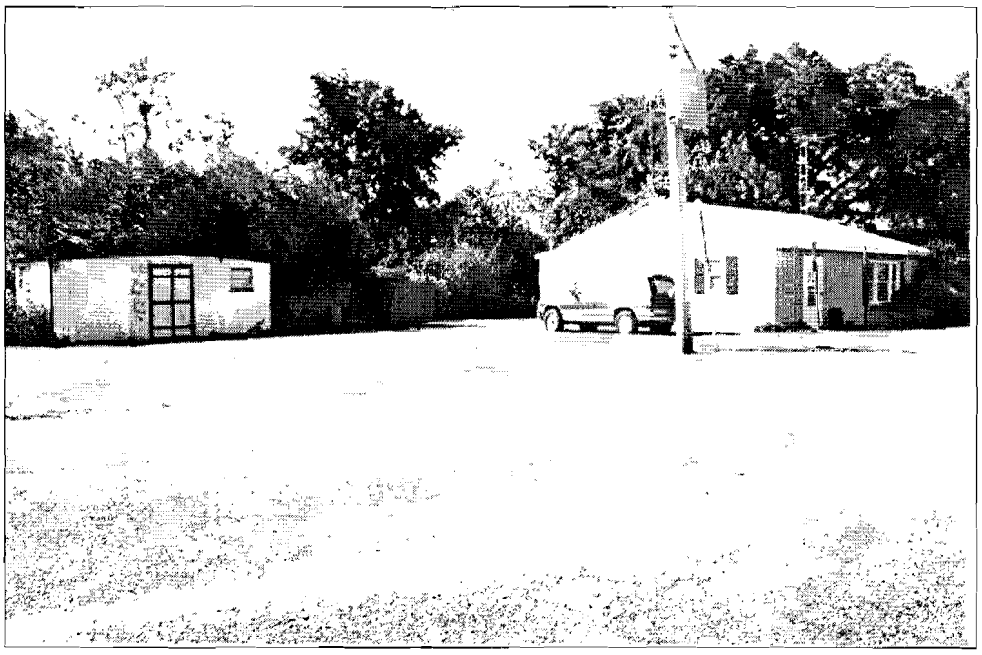


Plate 8: Potential Resource B. Outbuilding, shown in the left portion of the photo. Rifle Range Road, south side, between Route 13A and Route 13. October 2001.

Potential resource B is an outbuilding currently associated with what appears to be a modern house on the parcel **(Plate 8)**. Its date of construction and whether it is native to this location are unknown. Further investigation is necessary to determine the appropriate evaluation context and potential significance for this structure.

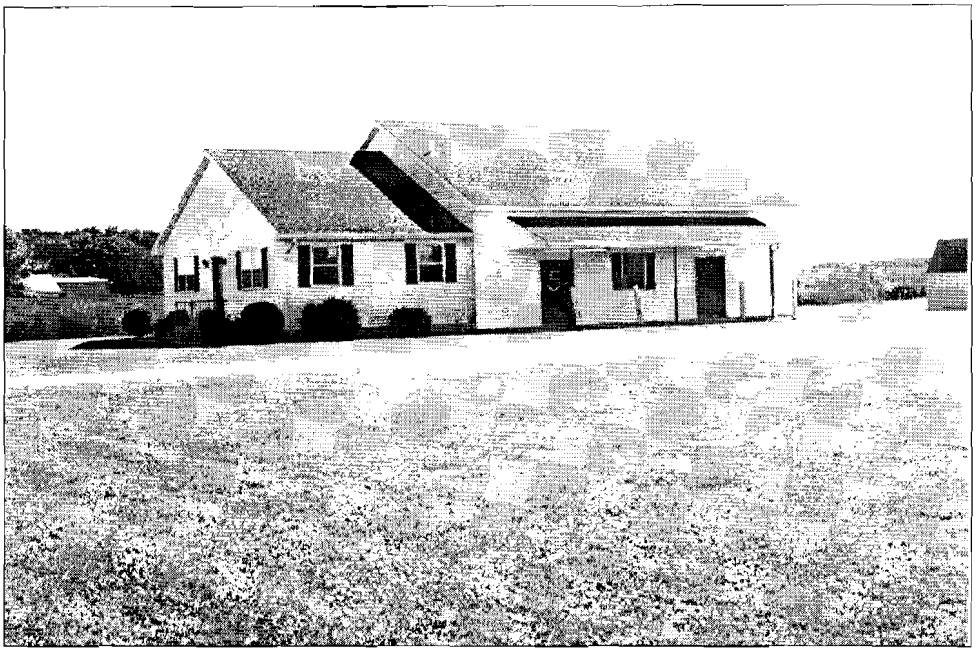


Plate 9: Potential Resource C. Rifle Range Road, south side, east of Route 13. View from NW. October 2001.

The origins and current use of potential resource C are currently unknown. The larger rear portion appears to pre-date the front portion, which rests on a concrete block foundation **(Plate 9)**. The fenestration of the rear portion indicates a non-residential use with two extra-wide doors and fluorescent tube lights under the pent roof of the west façade. The front addition creates a more formal entrance to the building and a direct orientation to Rifle Range Road.

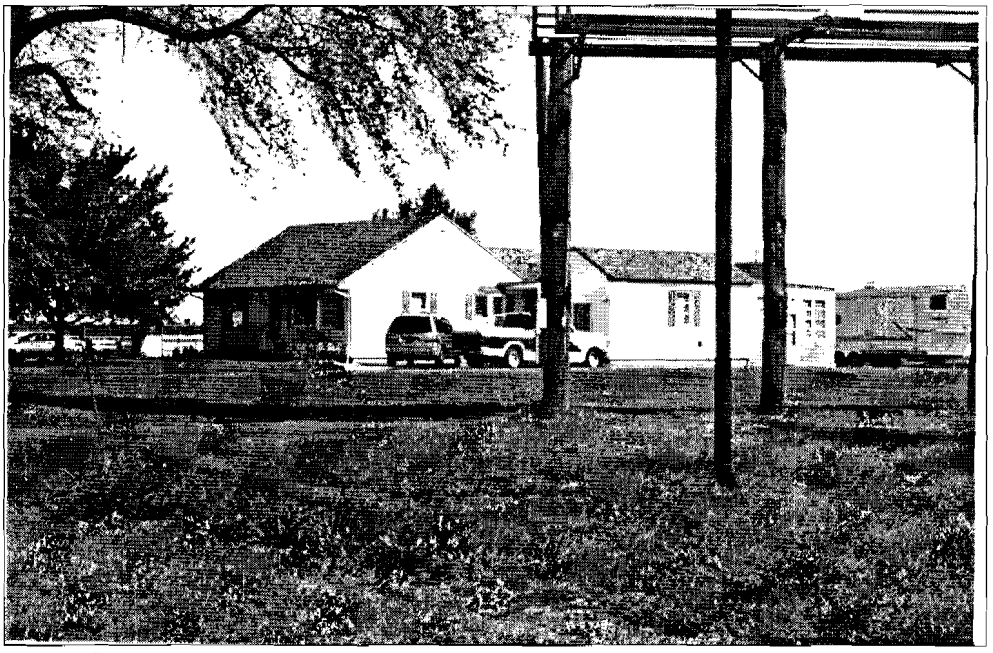


Plate 10: Potential Resource D. Route 13, east side, fourth building north of Route 404. October 2001.

The small 1-story house located just south of the used car lot on the east side of Route 13 south of Rifle Range Road (potential resource D - **Plate 10**), was once located in the southeast quadrant of the Route 13/Route 404 intersection, behind the current Exxon station. The house was moved before the McDonalds and other service-oriented structures were built (Hardesty, personal communication 2001).

Plate 11: Potential Resource E. Former Sunoco station, east side of Route 13, third building north of Route 404. October 2001.

An abandoned service station, potential resource E, was once a Sunoco (Hardesty, personal communication 2001). This structure is deteriorating, and holds a variety of discarded debris **(Plate 11)**.

Plate 12: Potential Resource F. Note the commercial/residential structure shown on the left. Route 13, east side, second building north of Route 404. October 2001.

Just south of this building lies potential resource F, a greatly modified structure that was originally a liquor store/tavern. There is currently an insurance office in the first floor and an apartment on the second floor with a separate entry. According to Mr. Hardesty, this building was constructed in the 1950s **(Plate 12)**.

Potential resource G **(Plate 13)**, adjacent to the insurance office, is an abandoned, deteriorating service station, originally constructed as a Shell station (Hardesty, personal communication 2001).

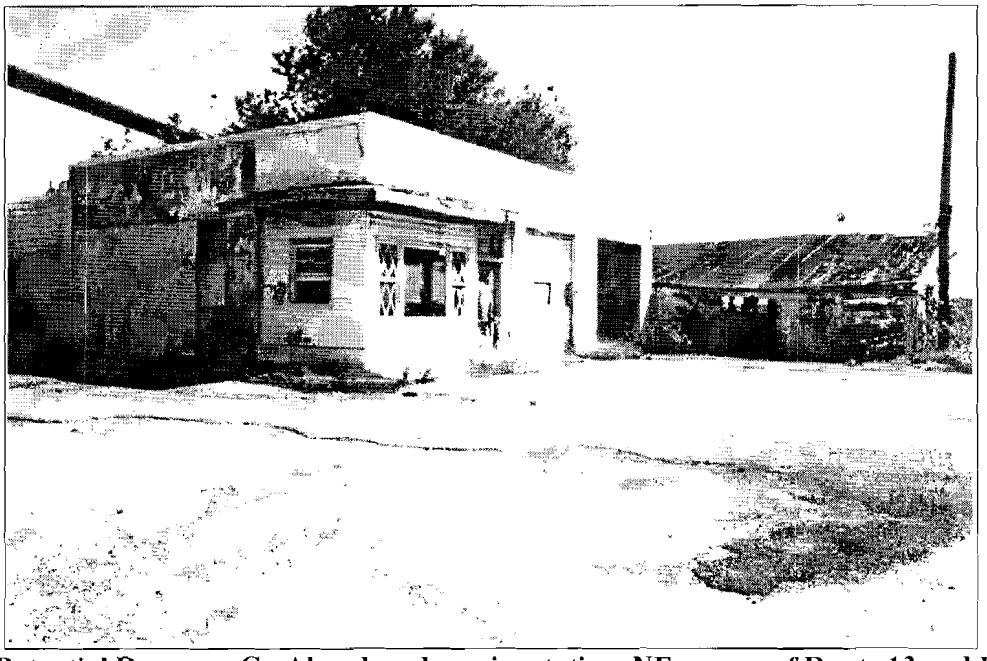


Plate 13: Potential Resource G. Abandoned service station, NE corner of Route 13 and Route 404. October 2001.

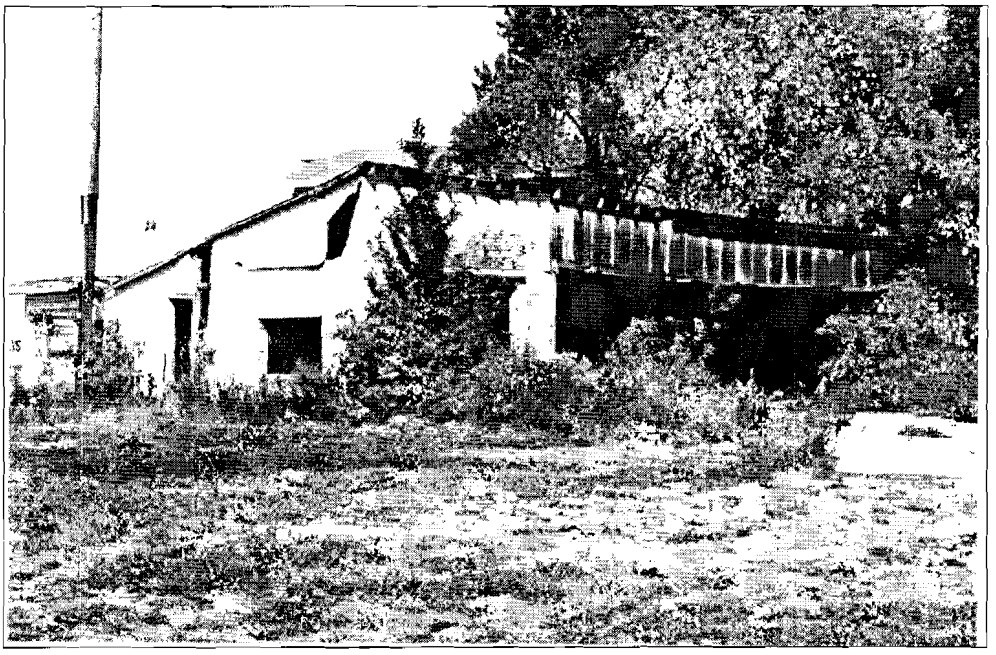


Plate 14: Potential Resource H. Abandoned shed associated with former airfield. NE corner of Route 13 and Route 404. October 2001.

Although abandoned and deteriorated, potential resource H is particularly interesting for its association with a nearly forgotten airfield at the northeast corner of Route 13 and Route 404. Mr. Hardesty stated that the airport was a small one, even at its peak, consisting of only four small hangars perpendicular to Route 404, one landing strip, and an equipment shed. The T-

shaped hangars were temporary structures made from rough lumber, 2x4-inch framing, masonite walls and roof and sliding doors. Only the shed remains, and it is abandoned and deteriorated **(Plate 14)**. This small airfield was created in 1938 by local resident, businessman, and flight enthusiast, James Scott (Frebert 1998). Already a pilot, Mr. Scott initially created the airfield for his personal use. The airfield was dormant during WWII due to flight restrictions, and was reopened and expanded in partnership with Harvey Spicer as Sussex Aero Industries, Inc. in 1946 (Frebert 1998). The facility operated as a flight school at that time, taking advantage of funding for new pilots through the G.I. Bill. The airfield closed in 1958 due to diminished business. Mr. Hardesty also noted that the airport operated as part of the Civilian Air Patrol program during World War II. This has not been verified. Laurel and Georgetown are more popular now for private plane storage and flight. Georgetown is the current home of the Sussex County Civilian Air Patrol unit. Due to the absence of the former associated structures and deterioration of the existing shed, this site lacks integrity.

The project area contains structures related to the historic context of the 19th and 20th centuries. Farmhouses and several outbuildings remain in use and in good condition, reflective of the historic and current agricultural landscape. Commercial structures and 20th-century houses also demonstrate the shift in style and function of the Route 13 corridor, away from the mostly intact town of Bridgeville located just to the northwest.

CRS Number	Location	Status	Previous Eligibility Recommendation
S-1692	Route 13, west side, south of Rte 404.	Demolished/moved	
S-1708	Route 13, east side,	Demolished/moved; silo extant	Not eligible (1992)
S-1711	Route 13A, east side	Demolished/moved	Individually eligible (1992)
Jacobs School	Route 404, north side	Moved	

Table 3: Potential Historic Archaeological Resources

Potential historic archaeological resources were identified though a combination of historic maps and locations of former structures previously surveyed. All potential resources identified will need to be examined based on their specific history and relation to the contexts defined by De Cunzo and Catts (1990). In addition, the areas surrounding historic structures and the locations of previously identified but no longer extant structures should be assessed as archaeological sites with the potential for eligibility to the National Register of Historic Places.

The location of S-1692 is not readily apparent, so additional research and possibly archaeological testing will be necessary to determine the exact location and boundaries of this site. This 2-story, 3-bay dwelling was known as the "Cannon House," and it was already deteriorating at the time of initial survey in 1980. The survey form also notes the presence of a related shed building.

The location of S-1708 is identifiable from the still extant silo on the property (**Plate 15**). As an architectural resource it was determined not eligible for the National Register. It has not been evaluated as an archaeological resource, but probably dates at least to the mid-19th century, as it

would seem to correspond to the "T. Jacobs" residence shown on the 1868 Beers Atlas (**Figure 4**).

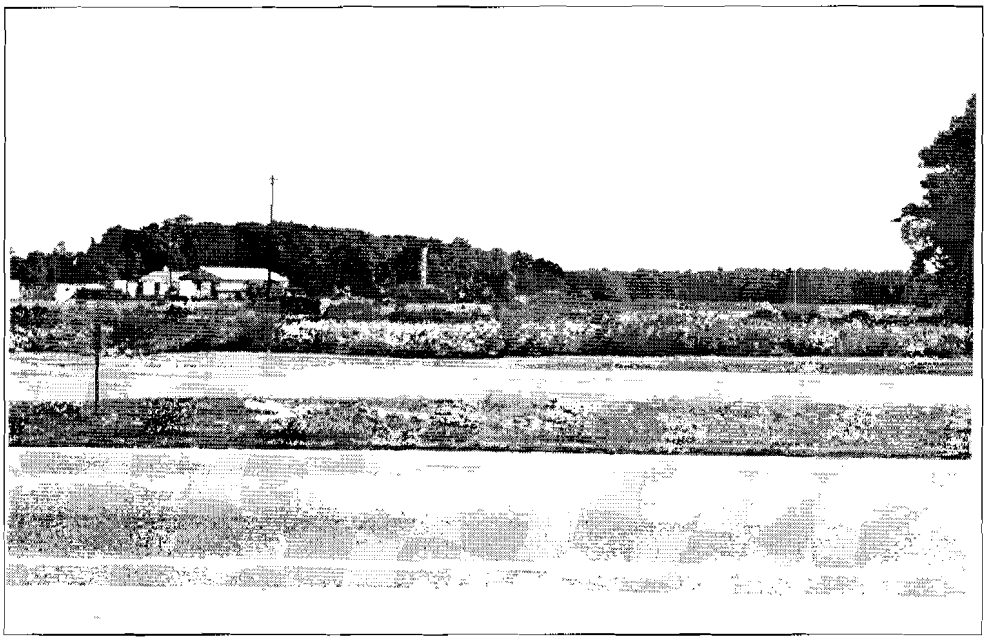


Plate 15: Extant silo of S-1708. East of Route 13. October 2001

Property S-1711 comprises an overgrown lot east of Route 13A. Archaeological testing would be required to assess the significance of this site, which had been determined eligible as an architectural resource. Impacts to property associated with any of the previously surveyed architectural resources would also have to be considered pending completion of the design for the proposed project.

Finally, the location of the Jacobs School No. 143 will need to be established and any archaeological remains identified. The marker for the school (**Plate 16**) corresponds to the location depicted by Beers (1868) (**Figure 4**). This area will be impacted by the proposed project as currently designed. While the school house was moved away from this location which may have also removed archaeological traces associated with the school building, ancillary features, such as privies, may survive below the surface.

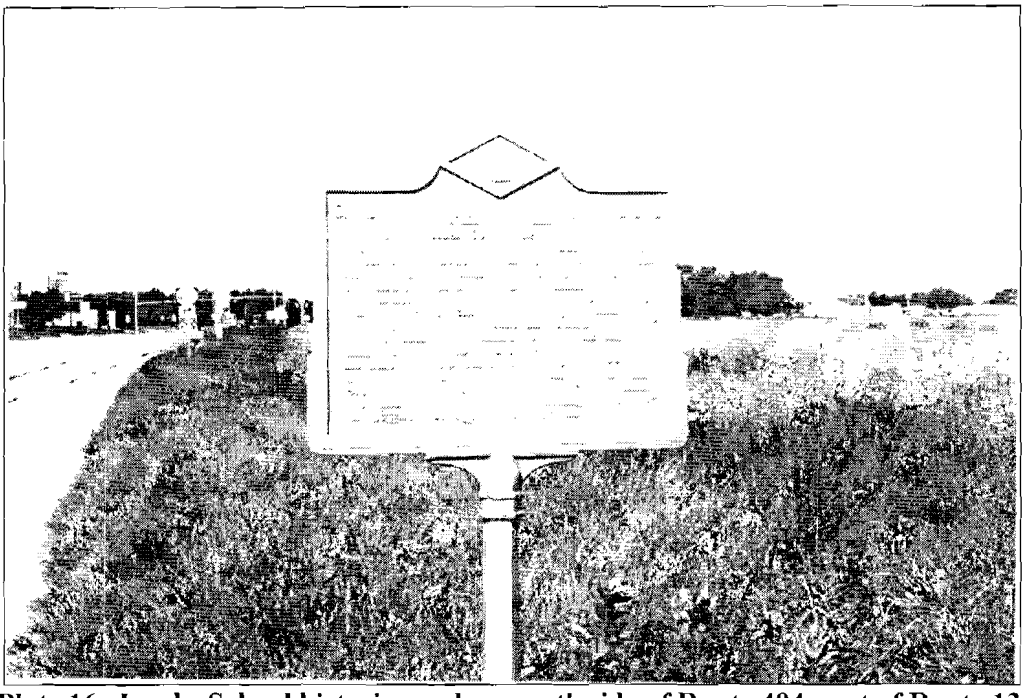


Plate 16: Jacobs School historic marker, north side of Route 404, east of Route 13. October 2001.

RECOMMENDATIONS AND CONCLUSIONS

A Phase IA archaeological survey of the proposed interchange improvements at U.S. Route 13 and Delaware Route 404 has been conducted by Gannett Fleming, Inc. Background research failed to identify any recorded archaeological resources within the project area, though archaeological components associated with the identified architectural resources can be anticipated. The study area is primarily included within High and Medium probability areas for significant prehistoric sites (UDCAR 1990). This factor along with the mapped soils within the study area and the surface water present, suggest a medium to high probability for archaeological sites within the area.

With the exception of the Jacobs School No. 143 site, the proposed alignment for the interchange improvements appears to avoid all identified potential historic archaeological sites. However, previously undetected archaeological sites may still occur in the study area. The location of the School needs to be confirmed and the integrity and significance assessed in order to determine if the project will have an effect on this potential resource. As well, final design may differ from that currently proposed and the area will need to examined in regard to such impacts.

Several previously identified and potential architectural resources were identified in the study area. Of the ten previously identified resources, three have been recommended eligible for the National Register of Historic Places in prior reports. The proposed alignment appears to avoid impacts to previously identified architectural resources. However, construction of the proposed alignment may impact several potential architectural resources (C, G and H). If intensive level surveys are required for the proposed project (e.g. if federal funding or permitting is utilized for

the project), further study will be required to confirm construction dates for potential resources, specific historical background, and significance. Due to integrity issues, several of the potential resources identified in this study (A, D, E, F, G, & H) do not appear to be significant as examples of construction type or design (Criterion C).

Gannett Fleming, Inc. recommends that additional archaeological investigation at the Phase IB level be conducted for this proposed project following formal initiation of the project by the sponsoring agency and the development of an official Area of Potential Effect in consultation with the DESHPO. Pedestrian reconnaissance of the cultivated fields (assuming surface visibility is sufficient) should be conducted to ascertain the presence or absence of archaeological sites within a defined project area, not limited to a proposed roadway. This method would avoid the need for multiple investigations of project areas limited to roadway footprints. Additional historic research should be conducted to identify the former location of the Jacobs School No. 143 as accurately as possible prior to field investigations. Gannett Fleming also recommends conducting an intensive level architectural survey if the project goes forward with potential impacts to these features.

BIBLIOGRAPHY

Anonymous
n.d. *Bridgeville.* In the Bridgeville Historic District National Register nomination file at the Delaware State Historic Preservation Office.

Beers, D. G.
1868 *Atlas of the State of Delaware.* Pomeroy & Beers, Philadelphia.

Bridgeville Historic District National Register Nomination. On file at the Delaware State Historic Preservation Office.

Catts, Wade P., Jay F. Custer and Angela Hoseth
1991 *A Cultural Resources Reconnaissance Planning Study of the Proposed Sussex East-West Corridor, Delaware Routes 404/18 and 9, Sussex County, Delaware.* Delaware Department of Transportation Archaeology Series No. 86. Dover.

Catts, Wade P., Scott C. Watson, Dawn Chesnaek, Daniel Bailey, and Jay F. Custer
1994 *An Archaeological Planning Survey of Selected Portions of the Proposed East-West , Delaware Routes 404/18 and 9, Sussex County, Delaware.* Delaware Department of Transportation Archaeology Series No. 115. Dover. (Unpublished, on file DESHPO)

Cultural Resource Survey Forms. On file at the Delaware State Historic Preservation Office.

Custer, Jay F.
1984 *Delaware Prehistoric Archaeology: An Ecological Approach.* University of Delaware Press, Newark.

1986 *A Management Plan for Delaware's Prehistoric Cultural Resources.* University of Delaware Center for Archaeological Research, Monograph No. 2, Newark.

1989a *Prehistoric Cultures of the Delmarva Peninsula: An Archaeological Study.* University of Delaware Press, Newark.

1989b *A Management Plan for the Prehistoric Archaeological Resources of Southwestern Delaware.* University of Delaware Center for Archaeological Research, Monograph No. 6, Newark.

1994 *Stability, Storage, and Culture Change in Prehistoric Delaware: The Woodland I Period (3000 B.C.-A.D. 1000).* Prepared for Delaware State Historic Preservation Office, Division of Historical and Cultural Affairs. Department of Anthropology, University of Delaware, Newark.

Custer, Jay F., and Daniel R. Griffith
1986 Late Woodland Cultures of the Middle and Lower Delmarva Peninsula. In *Late Woodland Cultures of the Middle Atlantic Region*, edited by Jay F. Custer, pp. 29-57. University of Delaware Press, Newark.

Custer, Jay F., and Glen R. Mellin
1989 Archaeological Survey in Southwestern Delaware, 1987-1988. *Bulletin of the Archaeological Society of Delaware* 26: 1-68. (New Series)

De Cunzo, Lu Ann, and Wade P. Catts
1990 *A Management Plan for Delaware's Historical Archaeological Resources*. Prepared for Delaware Department of State. University of Delaware Center for Archaeological Research, Newark.

Delaware Agricultural Experiment Station
1941 "Land Classification Map of Sussex County, Delaware, September 1941." Prepared as part of *An Economic Study of Land Utilization in Sussex County, Delaware*. Delaware Agricultural Experiment Station Bulletin 223. On file at Delaware State Archives.

Delaware State Historic Preservation Office
1993 *Guidelines for Architectural and Archaeological Surveys in Delaware*. Delaware State Historic Preservation Office, Dover.

Delaware State Highway Department
1970 *General Highway Map, Sussex County, Delaware*. Revised from 1964. On file at Delaware State Archives.

Eveleigh, Timothy, Jay F. Custer, and V. Clemas
1983 A LANDSAT Generated Predictive Model for Prehistoric Archaeological Sites in Delaware's Coastal Plain. *Bulletin of the Archaeological Society of Delaware* 14: 19-38. (New Series)

Franklin Survey Company
1930 *Franklin Survey Co.'s Official Map of Delaware State*. Franklin Survey Company, Philadelphia. On file at Delaware State Archives.

Frebert, George J.
1998 *Delaware Aviation History*. Edited by Debbie Haskell. Dover Litho Printing Co., Dover, Delaware,

Hancock, Harold B.
1976 *The History of Sussex County, Delaware*. Sussex County Bicentennial Committee, Sussex County, Delaware.

Hancock, Harold Bell
1985 *Bridgeville: A Community History of the Nineteenth Century.* Bridgeville Historical Society, Bridgeville, Delaware.

Hardesty, Howard
2001 Personal communication, 18 September.

Herman, Bernard L., and Rebecca J. Siders
1989 *Historic Context Master Reference and Summary.* Center for Historic Architecture and Engineering, College of Urban Affairs and Public Policy, University of Delaware, Newark.

Ireland, William, Jr., and Earle D. Matthews
1974 *Soil Survey of Sussex County, Delaware.* United States Department of Agriculture and Delaware Agriculture Experimental Station, Washington, D.C.

Kauffman, B., and J. Dent
1982 Preliminary Flora and Fauna Recovery and Analysis at the Shawnee Minisink Site (36Mr43). In *Practicing Environmental Archaeology: Methods and Interpretaions*, edited by Roger Moeller, pp. 7-18. Occasional Publication No.3, American Indian Archaeological Institute, Washington, Connecticut.

Lichtenstein Consulting Engineers, Inc.
2001 *Delaware's Historic Bridges.* Delaware Department of Transportation, Dover.

McNett, C.W., S.B. Marshall, and E. McDowell
1977 The Shawnee-Minisink Site. *Annals of the New York Academy of Sciences* 288: 282-296.

Munroe, John A.
2001 *History of Delaware.* 4th Edition. University of Delaware Press, Newark.

Scharf, Thomas
1888 *History of Delaware: 1609-1888.* Volumes I and II. J. L. Richards and Company, Philadelphia.

Stewart, R. Michael, Chris Hummer, and Jay F. Custer
1986 Late Woodland Cultures of the Middle and Lower Delaware River Valley and the Upper Delmarva Peninsula. In *Late Woodland Cultures of the Middle Atlantic Region*, edited by Jay F. Custer, pp. 58-98. University of Delaware Press, Newark.

Tabachnick, Alan D., Amy B. Keller and Kenneth J. Basalik
1992 *Sussex East West Corridor Study, Sussex County, Delaware.* Delaware Department of Transportation Archaeological and Historical Series No. 97. Dover.

University of Delaware Center for Archaeological Research (UDCAR)
1990 Coastal Plain Prehistoric Site Location Predictive Model Maps. UDCAR 10-90-50052-005. On file, Delaware State Historic Preservation Office, Dover.

Wilmer Atkinson Co.
1914 *Farm Journal Road Map of Sussex County, Delaware. Especially prepared for the Farm Journal Directory of Sussex County.* Wilmer Atkinson Co., Philadelphia. On file at Delaware State Archives.

APPENDIX A

Johnette Davies served as the lead author for the report. She holds a B.S. in History from Central Michigan University and a M.S. in Historic Preservation from the University of Pennsylvania. Ms. Davies is qualified as an Architectural Historian and conducted the historic architecture investigation and historic research for this project. Ms. Davies has 4 years experience in historic preservation in Delaware, New Jersey, and Pennsylvania.

John W. Martin, RPA, served as Principal Investigator for this project. Mr. Martin has over 20 years experience in cultural resource management throughout the Middle Atlantic region and has worked on numerous projects in Delaware. Mr. Martin holds a B.A. in Anthropology from the University of Delaware and an M.A. in Anthropology from Rutgers University and manages the Cultural Resource section of Gannett Fleming. In this capacity he oversees both archaeological and historic architectural investigations.